Public Invention Annual (Q4) Report, 2024

-- Robert L. Read (Rob), Jan 21st, 2025

Executive Summary

Public Invention has hit several milestones this year, and looks forward to continued growth in 2025. Publishing four peer-reviewed papers on key projects has allowed us to reach a wider audience. Additionally, we connected with a team of seniors at Colorado Mesa University who constructed a PolyVent for a course project. We completed a contract with NASA to build an Oxygen Engine Digital Control System for an oxygen generator that is expected to be nearly maintenance free. KidsOR gave us a grant of $20,000 and contracted with us to test this oxygen engine in the field. We received a large grant earmarked for the Global Distributed Tracking project, which has created a website ready for launch. The team has made progress on the Ferrofluid Check Valve, and volunteer Prajwal Shah finished the NanoCapTable project. Cledden Kwanin continues working on computational fluid dynamics for the EcoPot project, which Aditya Choksi has been modelling. Finally, Bene Skirde completed a research project on embedded electrical sensors within a plant with limited success.

Specific Project-based Goals for 2024 - Status

At Public Invention, the projects are the point. Below are the goals we committed to at the end of 2023, and their status.

- Make sure the NASA contract is a success. DONE
- Finish the GPAD HardwareX paper. PUBLISHED
- Submit the PolyVent Paper. PUBLISHED
- Make sure Colorado Mesa's use of PolyVent is a success. DONE
- Make GDT a usable project with 100 users by the end of 2024. USED BY 4-10 in 2 ORGs.
- Submit a paper on the PFCV. - NOT YET DONE
- Make progress on other projects (sensor, pump, squirt gun, nano cap table.) - NanoCapTable is a completed success. The sensor project was mostly a failure. The ferrofluid squirt gun project is underway.

Financial Position and Fundraising

Please see our financial statement in the appendices.

We have about $100,000 in assets and an additional $121,000 in funds for GOSQAS, which is now treated like a Public Invention project..

Our gala raised $3,508 in pledges. I matched this sum with $1,754, for a total of $5,262.

We received a general $50,000 gift from an anonymous donor, and another anonymous gift of $175,000 to support the Global Distributed Tracking project of GOSQAS, headed by me, Victoria Jaqua and Christina Cole. We also received a $20,000 donation for KidsOR.

We did not get the Freespireco NSF POSE grant. The reviews were similar to last year, which reported that the small size of our user community was the main reason for the decision . With the expanded use of the PolyVent, however, we have made progress on this weakness to improve for potential grant applications in the future.

The “Public Money” Problem

As of the end of 2024, Public Invention has enough funds to perform operations through 2025, mainly because I do not take a salary and all of my contract work goes to Public Invention. However, in the 2023 tax year, only 42% of this amount qualified as “public support.” This will likely decrease when calculated for the 2024 taxes. This puts us at grave risk of losing our 501c3 status by falling below the 33 ⅓% “public support” test from the IRS. If we fall below this percentage but remain above 10%, we can still keep our status for some time by arguing we are still operating as a public charity. However, we desperately need new donors, whether individuals or a granting organization, to keep us above these thresholds. Our fundraising efforts are focused on this.

Switch to Fund Accounting and Other Accounting Improvements

With the help of Christina Cole, an accountant who does the accounting for other nonprofits (e.g., REAP center, OSMS), we have moved to “fund-based accounting.” This will make it easier for us to show how we spend money on projects.

Although I have always kept receipts, we are now storing them directly in Quickbooks. This should ease the process if we need to open our books to a potential funder who wants to examine them.

We have also submitted our 990EZ tax form in a timely manner.

Projects

Global Distributed Tracking

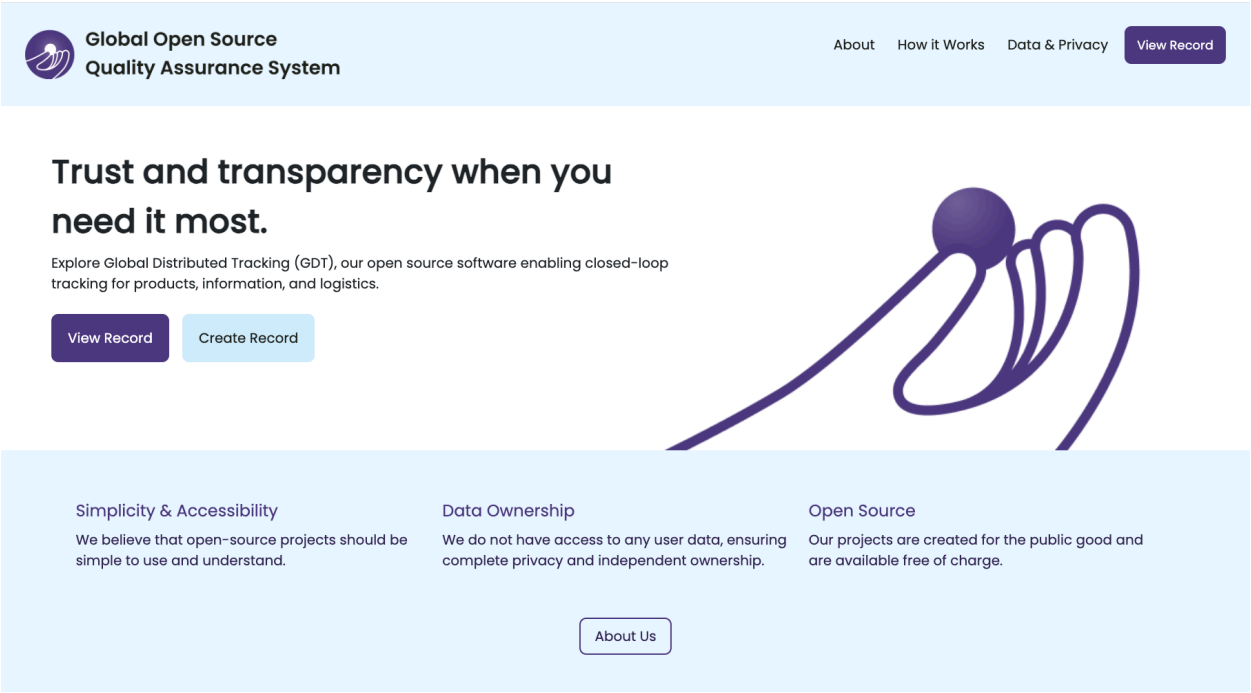
The GDT project is now the flagship project of Public Invention. It is a pure-software system that grew out of the learned need to fight counterfeit medical goods by tracking the chain of custody globally. The website is highly functional and in use, and is ready to be launched. In that sense, it is a great success.

It has been lightly used by two groups. One in Poland makes the Glia tourniquet and distributes it in Ukraine. The other, DMDM, is a non-profit in Tucson that is making the first FDA-approved open makerspace, where it also manufactures the Glia tourniquet for use in Sudan.

The GDT project has about $120,000 in its account at the beginning of the year. We are actively engaging a firm to make a promotional video. A number of volunteers who began working for free have been placed on contract.

By happenstance, this team is mostly women except for me, Harry Pierson and Ben Coombs. We hope to maintain this demographic and continue to recruit women.

The GDT is probably the Public Invention project that is the most likely to have a major impact.



NASA Ceramic Oxygen Generator Project

NASA and American Oxygen have developed an ion transport membrane ceramic oxygen generator called an “Oxygen Engine.” This is expected to have major global health uses. Public Invention has been engaged in developing the Oxygen Engine Digital Control System (OEDCS).

We received $100,000 from NASA and spent all of it on equipment and the project’s paid engineers. This was a failure, in that I worked many hours on this project and Public Invention gained no funds from it.

Additionally, we executed a $60,000 contract with NASA for additional work that we completed on Sept. 15th. We received a $20,000 grant from KidsOR and a $60,000 contract to test the oxygen generator in Scotland and Zambia. We developed an Oxygen Analyzer to log purity and flow for nine months.

This project, and half of the KidsOR money, has been delayed by American Oxygen’s production problems. We continue to work a great deal on this project and it absorbs a great deal of time. However, it continues to hold the promise of saving many lives. It has furthermore taught us how to build devices that handle kilowatts of power, opening the door to new projects and inventions.

PolyVent

Rice University asked for a sample invoice and negotiated a low price for a PolyVent, but then never got back to us.

In April 2024, we traveled to Colorado Mesa University and delivered one of our two extant PolyVent ventilators. They will attempt to build one in the fall as part of a classroom exercise. They have already used it to drive a lung model, using two balloons in a tank of saline water, as part of their work in Electrical Impedance Tomography (EIT).
During my trip there, I gave several lectures and a live demo of the ventilator to around 25 individuals each time.

At the end of the semester, a team of senior students successfully completed the construction of a functioning PolyVent from our instructions. This is a great success, and is in some sense the culmination of work begun by Victor Suturin and Nathaniel Bechard in 2020. This work was documented in a 50-page paper which was quickly accepted and published by HardwareX.

We hope CMU continues working with the PolyVent. We hope this project continues to become a useful educational and research tool. We do not have an immediate plan for accomplishing this beyond supporting CMU.

Moonrat

A team composed of three graduate students at Cinvestav University in Guadalajara, lead by Melanie LaPorte and mentorship from Lee “El Ejecutor” Erickson, created a new and improved version of the Moonrat portable incubator. Melanie and Lee designed a PCB assembly, and the Guadalajara team is designing enclosures and improved software. They have implemented a fuzzy logic controller, in addition to the functioning PID controller.

A Penn State student took an older version of the Moonrat to the Galapagos Islands and successfully used it for her PhD work in hydroponic food safety.

I have also improved the software, and Melanie is implementing a minor change to the PCB. We hope to complete testing the Moonrat and submit a paper to HardwareX in March 2025.

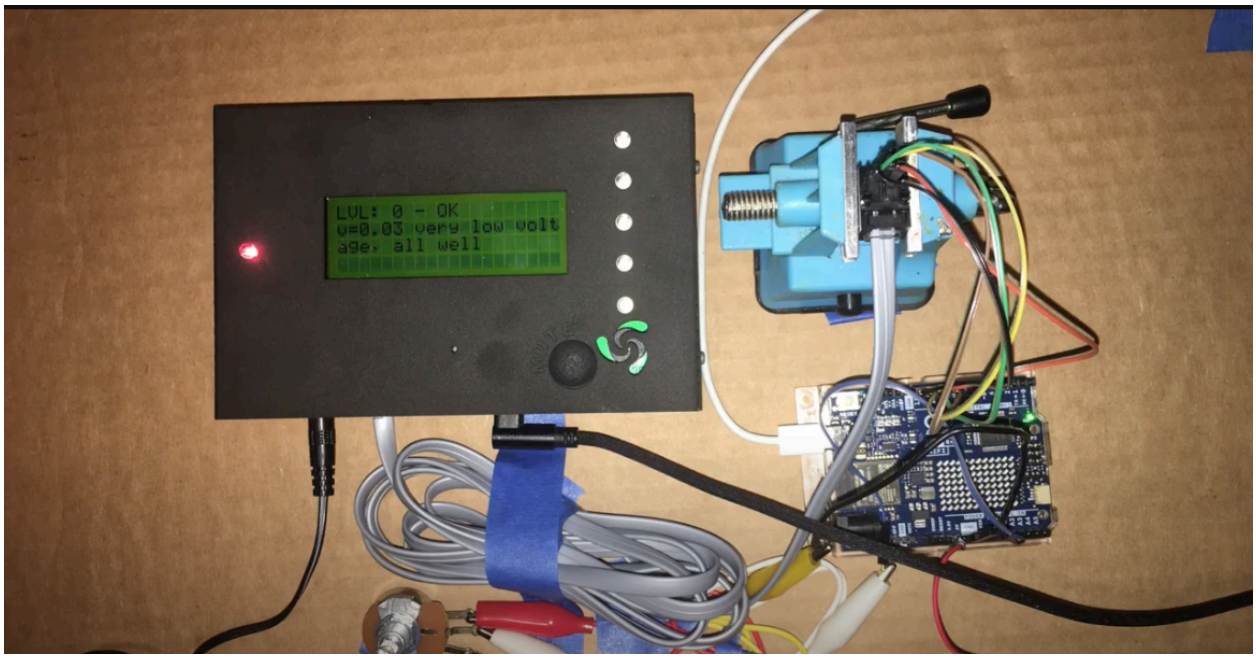
General Purpose Alarm Device (GPAD) / Krake

Nagham Kheir is designing the next version of the General Purpose Alarm Device in Lebanon, andLee Erickson provides mentorship for the project. The new version is codenamed the “Krake,” an intentional misspelling of a Lebanese waterfowl.

The Krake will be WiFi enabled and capable of reproducing recorded sounds, such as spoken English like “A Hose is Disconnected.”

Nagham has done a great job designing a new PCB, which we will order soon. The Krake project raises a large number of interesting, pure computer science questions around “Alarm Dialog Management.”

The GPAD, an older version of the Krake, is shown below.

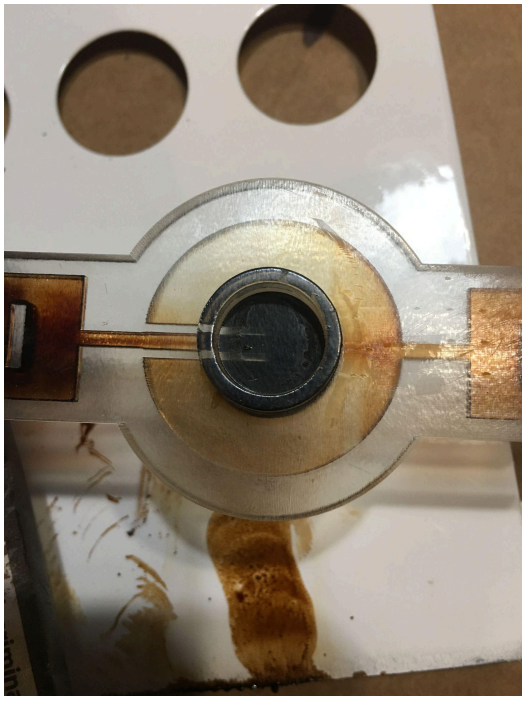


Passive Ferrofluid Check Valve (PFCV)

Joe Hershberger has joined the Passive Ferrofluid Check Valve team. Lisa Kotowski has dropped out, after providing significant theoretical improvements.

Joe and I made several versions of the valve and have improved it. We can now hold a pressure of 200 cm H2O (about 3 psi) with a relatively low cracking pressure of about 6 cm H2O. We have new untested versions which may work even better.

Creating an operating theory of the PFCV has been intellectually difficult, but I believe I am making some progress. This is an intellectually significant invention, and the time-consuming nature of the NASA work has prevented faster progress.



Ferrofluid Pump

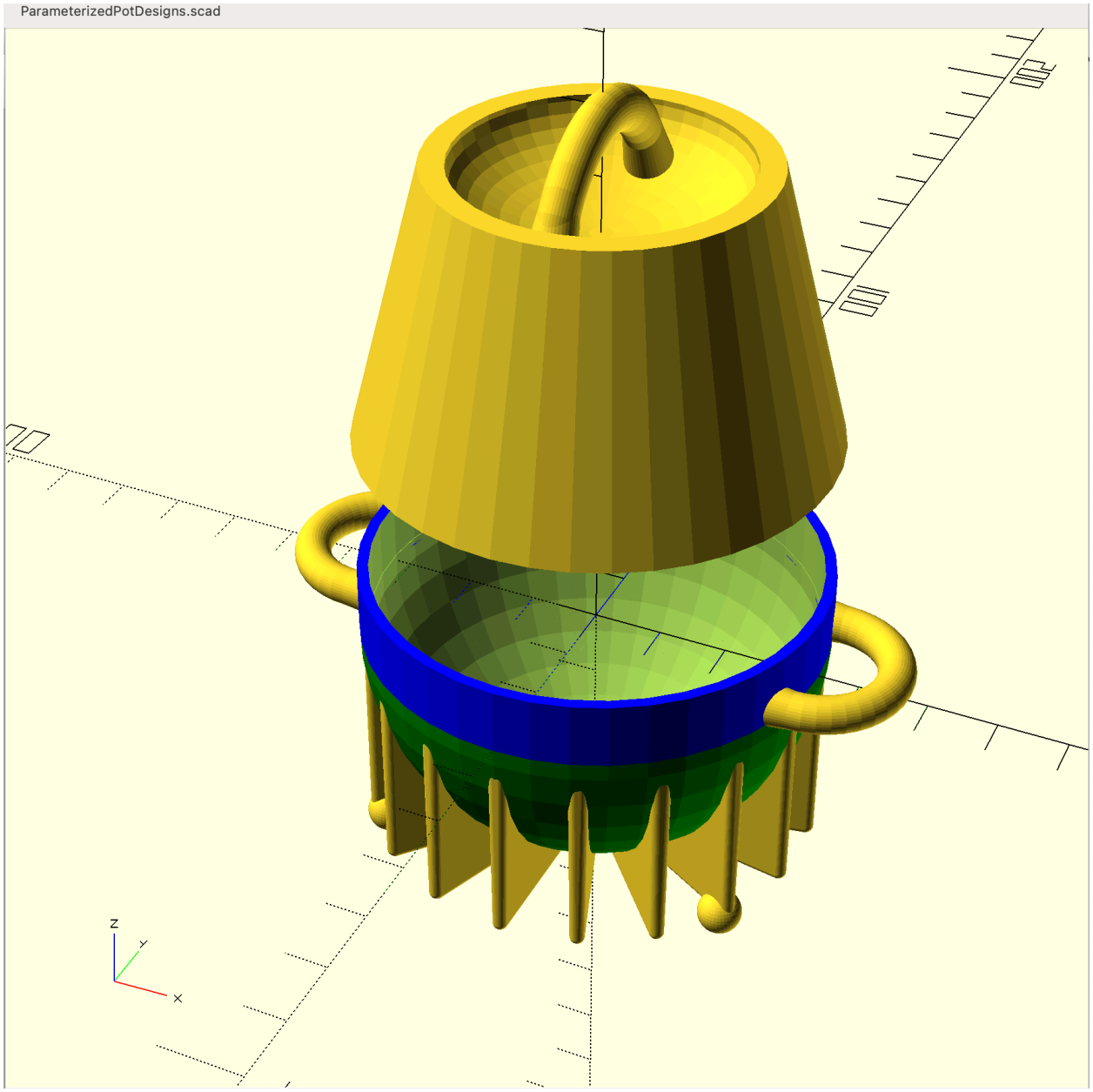
Joe Hershberger is also working on a different idea, the 7-circle ferrofluid pump. Additionally, a new student, Asmi Shirsat, will explore a different project to make a pump based on the idea of a ferrofluid squirt gun.

The EcoPot Project

Two years ago, I mentored a team at Rice University that produced a cooking pot that once showed a 42% reduction in fuel usage necessary to boil water. Since one billion people still cook on open fires in the world and have to gather firewood, this project has tremendous potential.

I have begun working with a Ghanaian engineer named Cledden Obeng-Poku Kwanin to design an improved pot based on our own theories that we will test. Cledden has been using the OpenFOAM computational fluid dynamics program to attempt to simulate the hot gases flowing around the pot. Public Invention bought him a powerful Mac computer to allow these time consuming computations to be performed.

Volunteer Aditya Choksi, who is still in high school, has been learning OpenSCAD, and produced the following pot design. We will eventually test it either with an actual flame or with OpenFOAM:



Embedded Botanical Electrical Impedance Monitoring

Volunteer Bene Skirde used a $200 NanoVNA Vector network analyzer in an attempt to build a sensor that uses electrical impedance to measure moisture and sugar content within vascular plants. We greatly underestimated the complexity of this project, but Bene and I have been learning together with help from Lawrence Kincheloe. The project is over and produced information, but no publishable or usable research.

Nano Cap Table

Prajwal Shah did a great job finishing the NanoCapTable project in a single summer. Christina Cole may become the invention coach for this project. It uses GitHub to allow for very light capital table recording. This is an essential but unrecognized need, because many startups have difficulty keeping track of stock options.

Library of Open Source Hardware (LOSH) Support

We have dedicated $5,000 to make open source hardware designs more accessible by adding them to the LOSH searchable index. This involves making a “manifest” for each project in a standard format called “Open Know How” (OKH). Mairin O’Grady has made about 35 OKHs from open source hardware designs of personal protective equipment. Open Source Medical Supplies (OSMS) curated the original projects, which were in danger of being irretrievably lost.

In doing this, we are knitting together the Internet of Production Alliance, Helpful Engineering, Open Source Medical Supplies, LOSH, and Public Invention, to forge a global community of free-libre open source hardware designs.

Outreach

Miriam Castillo continues to recruit volunteers. We have improved the presentation of projects at our website, and update active projects as they progress. Miriam has learned to use Google Ads effectively for us, utilizing Google’s gift to non-profits of $500 per month in free advertising.

Monthly Inventor Gatherings on the Third Thursday

In 2024 we continued having monthly Inventor Gatherings on the third Thursday of every month. These have been attended by between 2 and 20 people. We invite all readers of this report to register at EventBrite and join us for future events! This has been recognized by some as a major thought-leadership event. I believe this is slowly building momentum.

Speaker	Topic	Date	Number of participants	Link

Bert Rothenbach and Robert L. Read	Idea to Breadboard to PCB to Product: The Public Invention Way	12/19/2024		https://youtu.be/dZfNLWPcgNU
Robert L. Read	Personal Thoughts on Silviculture, Permaculture, and Regenerative Agriculture	10/17/2024		https://youtu.be/XBYaVC7u39M
Robert L. Read	The Crisis in Our Universities and What To Do About It	11/21/2024		https://youtu.be/q1fS7CdIZ5U
Robert L. Read, Prajwal Shah, and Christina Cole	"Nano-Cap-Table" project in August supported by Christina and Kilana.	8/15/2024		https://youtu.be/MlWDs2eXflo
Robert L. Read	The Mind-blowing Beauty of Computer Science	7/18/2024		https://youtu.be/JAQI3JtWK9o
Joe Hershberger	Ferrofluid experiments, passive ferrofluid check valve PFCV.	6/20/2024		https://youtu.be/MlWDs2eXflo
Gavin Taylor	The Institute for Globally Distributed Open Research and Education (IGDORE) and Open Science	5/16/2024	**8**	https://youtu.be/Lr-sMsRigHc
Prof. Michelle Mellenthin and Talles Santos	The Polyvent Ventilator and Electrical Impedance Tomography	4/18/2024	**7**	https://youtu.be/JRtxTfWx-Go?si=63u3YOv90PPZLyJQ
Dale Dougherty	2024 Gala and Fundraising	3/21/2024	**24**	https://youtu.be/6iFIMFUCaXM?si=lpKTrUM9gSdW49lu
Robert L. Read	The Gadgeteer Super Hero Trope Made Real	2/15/2024	**11**	https://youtu.be/MGi0Rt5fd7U?si=il_Rv7zBBvK-Norw
Robert L. Read	Supply Chain as a Humanitarian Responsibility	1/18/2024	**12**	https://youtu.be/hxK4HlY9-mc?si=OM_jAecj00WdpjSL

The Inventors' Gathering videos post to YouTube after the event. They probably increase our subscriber base at YouTube, and the reach of our projects. Participants have expressed very positive feedback.

Grant Writing

We applied to the (Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring) PAESMEM award for $10,000, which we did not receive. The reviews suggest they want "collect[ed] statistics about who you help and your impact." I refuse to do this, because our mentorship advances the careers of real human beings, and cannot be reduced to statistics.

We continue to employ Jessica Feather to look for grant opportunities for Public Invention and GDT in particular.

Peer-reviewed Publications and Submissions

We published four peer-reviewed papers in 2024:

Read, R. L., Cole, C. A., Jaqua, V., & Lamb, A. (2024, October). Open Know-How and an Open Source Hardware Registry as a Unifying Discoverability Mechanism for Open Source Hardware Humanitarian Engineering Projects. In *2024 IEEE Global Humanitarian Technology Conference (GHTC)* (pp. 132-136). IEEE.

Read, R. L., Bechard, N., Suturin, V., Zuiderwijk, A., & Mellenthin, M. (2025). The PolyVent educational platform: An open mechanical ventilation platform for research and education. *HardwareX*, e00615. https://www.sciencedirect.com/science/article/pii/S2468067224001093

Read, R. L., Kincheloe, L., & Erickson, F. L. (2024). General Purpose Alarm Device: A programmable annunciator. *HardwareX*, *20*, e00590. https://www.sciencedirect.com/science/article/pii/S2468067224000841

In our co-work with Project Data of Helpful Engineering, I was a co-author of:
https://link.springer.com/article/10.1007/s43069-024-00303-1
Villar, A., Abowitz, S., Read, R. *et al.* Maximizing Supply Chain Resilience: Viability of a Distributed Manufacturing Network Platform Using the Open Knowledge Resilience Framework. *Oper. Res. Forum* **5**, 26 (2024). https://doi.org/10.1007/s43069-024-00303-1

Products

Public Invention is a non-profit. Nonetheless, we believe we can have a bigger impact by doing “short-run” productions of small numbers (less than 20) units of our inventions and offering them for sale. This service makes it easier for people to evaluate our inventions, even though all of them are completely open source.

We now intend to productize and place on sale:

- The VentMon T0.5
- The General Purpose Alarm Device (GPAD) 0.2
- The PolyVent

Megan has created a storefront for these products, but we have not had purchases yet.

Partnerships and Cooperation

I acted as a judge at the Rice360 global design project science fair for senior capstone teams worldwide. I am also an active board member at Helpful Engineering, a similar 501c3.

We are beginning partnering discussions with the Open Insulin Project.

We work closely with LOSH and Helpful Engineering.

Volunteers

Nothing lasts forever. We have had some great volunteers who have finished their work or moved on. It is a major goal of Public Invention to leave every volunteer with a positive experience so that they refer new volunteers to us.

Taken as a whole, our current volunteers are a strong team as of December. They are:

1. Robert L. Read - oversees all projects
2. Lawrence Kincheloe - NASA, Embedded Botanical Sensors
3. Lee Erickson - NASA, Moonrat, Krake
4. From Cinvestav University, Guadalajara (Moonrat):
    a. Silvia Casillas
    b. Luis Enrique Ruiz Fernandez
    c. Horacio Garcia
5. Benedetto Skirde - Embedded Botanical Sensors [Project Done]
6. Melanie Laporte - Moonrat and fundraising
7. Joe Hershberger - Ferrofluid Check Valve and Ferrofluid pump
8. Tripti Pandey - Ferrofluid Check Valve [quit due to health]
9. Asmi Shirsat - Ferrofluid pump
10. Nagham Kheir - Krake
11. Geoff Mulligan - (NASA)
12. Prajwal Shah - Nano Cap Table [Project Done]
13. Cledden Obeng-Poku Kwanin – EcoPot
14. Asmi Shirsat - Ferrofluid Squirt Gun/Pump
15. Mairin O'Grady - Technical writing assistance.
16. Aditya Choksi - EcoPot

Public Invention is a major part of the GOSQAS/GDT effort, which meets weekly, and includes:

1. Victoria Jaqua
2. Christina Cole
3. Harry Pierson
4. Anusha Shringi (high school)
5. Nora Moor (high school)
6. Katie Pryal
7. Judith Weng

8. Coco Cheng
9. Hira Taqueer
10. Francesca Williams

The three outputs of Public Invention are inventions, papers, and experienced volunteers. We trust and hope that most of these volunteers obtain something of value. We clearly have more volunteers than ever right now, especially if you count the eight volunteers for the GDT effort.

General Strategies for 2025

Public Invention is a respected and effective non-profit in the small space of open source humanitarian engineering. We are publishing good research, as measured by peer-reviewed publications, and we are slowly growing our volunteer base. We have more money and volunteers than ever.

However, measured against the goal of creating a world-wide movement to create open-source inventions in the public interest, our impact has been small. We have probably not saved any lives yet.

Our biggest immediate problem is garnering more funds or grants to make sure that we meet the “public support” test of 33 ⅓% of income coming from the public.

Our biggest, long-term goal is to increase Invention Coaches who can lead projects. At present only Lee Erickson, Victoria Jaqua, and I are acting as Invention Coaches.

In 2024, we plan to:

1. Apply for grants from more second-tier (regional) foundations.
2. Recruit more Invention coaches, possibly by absorbing and supporting other projects.
3. Finish the publication of our existing projects.
4. Hold in-person events.

Specific Project-Based Goals for 2025

At Public Invention, the projects are the point. Our project specific goals are:

- Make sure the KidsOR field test of oxygen generation is a success.
- Make GDT a usable project with 100 users by the end of 2025.
- Submit a paper on the PFCV.
- Submit the Moonrat paper.

Appendix A: 2024 End-of-year Financial Reports

Appendix A1: Statement of Financial Position

Public Invention

Statement of Financial Position

As of December 31, 2024

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
Fidelity Z40323246	65.82
Wells Fargo CD Savings Account	150,000.00
Wells Fargo Simple Business Checking (7066)	113,482.19
PayPal	1,926.67
Total Wells Fargo Simple Business Checking (7066)	**115,408.86**
Total Bank Accounts	**$265,474.68**
Other Current Assets	
Petty Cash	-0.90
Total Other Current Assets	**$ -0.90**
Total Current Assets	**$265,473.78**
TOTAL ASSETS	**$265,473.78**
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Other Current Liabilities	
Robs personal contributions	-32.12
Total Other Current Liabilities	**$ -32.12**
Total Current Liabilities	**$ -32.12**
Total Liabilities	**$ -32.12**
Equity	
Opening Balance Equity	-1,421.08
Owner's Investment	22.17
Retained Earnings	-1,578.80
Net Revenue	268,483.61
Total Equity	**$265,505.90**
TOTAL LIABILITIES AND EQUITY	**$265,473.78**

Appendix A2: Statement of Activity

Public Invention

Statement of Activity

January - December 2024

	TOTAL
Revenue	
Donation	254,580.76
Research Contract Revenue	61,367.00
Sales	87,463.00
Total Revenue	**$403,410.76**
GROSS PROFIT	**$403,410.76**
Expenditures	
Advertising & Marketing	1,309.00
Awards	1,326.06
Total Advertising & Marketing	**2,635.06**
Ask My Accountant	373.85
Bank Charges & Fees	311.77
Books	131.04
Charitable Contributions	4,111.64
Contractors	107,353.19
Equipment	14,959.92
Interest Paid	-2,954.60
Job Supplies	156.94
Legal & Professional Services	1,858.64
Meals & Entertainment	708.67
Office Supplies & Software	2,097.49
Publication Fees	689.13
Purchases	-19.33
Research	146.13
Shipping	740.64
Travel	1,626.97
Total Expenditures	**$134,927.15**
NET OPERATING REVENUE	**$268,483.61**
NET REVENUE	**$268,483.61**

Appendix A3: Statement of Activity by Class

Public Invention

Statement of Activity by Class

January - December 2024

	ECOPOT	EMBEDDED BOTANICAL SENSOR	ERROR	FERROFLUID CHECK VALVE	GENERAL ALARM MODULE	GEOTAG TEXT	GOSQAS	KIDSOR	MOONRAT	NASA-COG	POLYVENT	PUBLIC INVENTION	VENTMON	NOT SPECIFIED	TOTAL
Revenue															
Donation							157,500.00				1,245.50	95,835.26			$254,580.76
Research Contract Revenue										61,367.00					$61,367.00
Sales								30,000.00		57,463.00					$87,463.00
Total Revenue	**$0.00**		**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$157,500.00**	**$30,000.00**	**$0.00**	**$118,830.00**	**$1,245.50**	**$95,835.26**	**$0.00**	**$0.00**	**$403,410.76**
GROSS PROFIT	**$0.00**		**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$157,500.00**	**$30,000.00**	**$0.00**	**$118,830.00**	**$1,245.50**	**$95,835.26**	**$0.00**	**$0.00**	**$403,410.76**
Expenditures															
Advertising & Marketing												1,309.00			$1,309.00
Awards												1,326.06			$1,326.06
Total Advertising & Marketing												**2,635.06**			**$2,635.06**
Ask My Accountant			475.35									-101.50			$373.85
Bank Charges & Fees	113.32								3.28			195.17			$311.77
Books					107.17		23.87								$131.04
Charitable Contributions												4,111.64			$4,111.64
Contractors					420.00		27,837.72			74,190.47		4,905.00			$107,353.19
Equipment	3,777.62	243.17		2,904.04	395.62				1,548.47	5,397.95	38.95	447.87	102.76	103.47	$14,959.92
Interest Paid												-1,378.80		-1,575.80	$ -2,954.60
Job Supplies									143.73	13.21					$156.94
Legal & Professional Services							956.25					902.39			$1,858.64
Meals & Entertainment							79.41			110.36	372.51	146.39			$708.67
Office Supplies & Software				149.23		7.00	193.21				96.26	1,647.79		4.00	$2,097.49
Publication Fees												689.13			$689.13
Purchases				-19.33											$ -19.33
Research				33.58	107.15							5.40			$146.13
Shipping									10.75	169.52	141.55	418.82			$740.64
Travel											1,525.47	101.50			$1,626.97
Total Expenditures	**$3,890.94**	**$243.17**	**$475.35**	**$3,067.52**	**$1,029.94**	**$7.00**	**$29,090.46**	**$0.00**	**$1,706.23**	**$79,881.51**	**$2,174.74**	**$14,725.86**	**$102.76**	**$ -1,468.33**	**$134,927.15**
NET OPERATING REVENUE	**$ -3,890.94**	**$ -243.17**	**$ -475.35**	**$ -3,067.52**	**$ -1,029.94**	**$ -7.00**	**$128,409.54**	**$30,000.00**	**$ -1,706.23**	**$38,948.49**	**$ -929.24**	**$81,109.40**	**$ -102.76**	**$1,468.33**	**$268,483.61**
NET REVENUE	**$ -3,890.94**	**$ -243.17**	**$ -475.35**	**$ -3,067.52**	**$ -1,029.94**	**$ -7.00**	**$128,409.54**	**$30,000.00**	**$ -1,706.23**	**$38,948.49**	**$ -929.24**	**$81,109.40**	**$ -102.76**	**$1,468.33**	**$268,483.61**

Cash Basis Saturday, May 3, 2025 12:01 AM GMT-07:00 1/1

Appendix B: Annual Awards 2024

Judith Weng
Best Public Inventor, 2024
For Global Distributed Tracking

Nagham Kheir
Best New Public Inventor, 2024
For the Krake Annunciator

Forrest Lee Erickson
Best Invention Coach, 2024
For the Krake Annunciator

Nathaniel Bechard
Best Technical Paper, 2024
PolyVent Educational Platform, HardwareX

Nina Lahoti
Best GUI Design, 2024
For Global Distributed Tracking

Benedetto Skirde
Best Scientific Experiment, 2024
For Embedded Botanical Sensors

DMDM
Recognized External Ally
For Groundbreaking Open Source FDA Work, 2024

Mairin O'Grady
Best Paid Staff Contribution, 2024
For Technical Writing and LOSH

Victoria Jaqua
Best Invention Coach 2nd Place, 2024
Product Owner of Global Distributed Tracking

Harry Pierson
Best Invention Coach 3rd Place, 2024
Tech Lead of Global Distributed Tracking

Prajwal Shah
Best New Public Inventor, 2nd Place, 2024
For NanoCapTable

Alison Gilpatrick
Best New Public Inventor, 3nd Place, 2024
For Global Distributing Tracking

Cledden Obeng-Poku Kwanin
Best New Public Inventor, Honorable Mention, 2024
For the EcoPot Simulation

Asmi Shirsat
Best New Public Inventor, Honorable Mention, 2024
For the Ferrofluid Check Valve

Aditya Choksi
Best New Public Inventor, Honorable Mention, 2024
For the EcoPot Design

Nora Moor
Best New Public Inventor, Honorable Mention, 2024
For Global Distributing Tracking

Coco Chen
Best New Public Inventor, Honorable Mention, 2024
For Global Distributing Tracking

Christina Cole
Best Volunteer Service, 2024
For Accounting Support

Lawrence Kincheloe
Best Public Inventor, 2nd Place, 2024
For NASA-MCOG

Katie Pryal
Best Public Inventor, 3rd Place, 2024
For Global Distributed Tracking

Joe Herschberger
Best Public Inventor, 4rd Place, 2024
For Ferrofluid Check Valve and Pump

Ben Coombs
Best Public Inventor, Honorable Mention, 2024
For Global Distributed Tracking

Horacio Garcia
Best Public Inventor, Honorable Mention, 2024
For the Moonrat Portable Incubator

Silvia Casillas
Best Public Inventor, Honorable Mention, 2024
For the Moonrat Portable Incubator

Enrique Ruiz
Best Public Inventor, Honorable Mention, 2024
For the Moonrat Portable Incubator

Megan Cadena
Best Paid Staff Contribution, 2nd Place, 2024
For Outreach Coordination

Miriam Castillo
Best Paid Staff Contribution, 3rd place, 2024
For Google Ads and Recruitment